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| PEPPER HAMILTON LLP | | | DATSKOVSKIY, SERGEY | |
| One Mellon Bank Center 500 Grant Street | | | ART UNIT | PAPER NUMBER |
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| Pittsburgh, PA 15219 | | | DATE MAIL ED: 03/14/2004 | ς. |

Please find below and/or attached an Office communication concerning this application or proceeding.

| <u> </u> | Application No. | Applicant(s) |
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| | 09/891,311 | CLARK ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | Sergey Datskovskiy | 2121 |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the c | orrespondence address |
| A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |
| Status | | |
| Responsive to communication(s) filed on 20 Ja This action is FINAL. 2b) ☐ This Since this application is in condition for alloware closed in accordance with the practice under E | action is non-final. nce except for formal matters, pro | |
| Disposition of Claims | | |
| 4) ⊠ Claim(s) <u>1-20</u> is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-7,10,11 and 14-20</u> is/are rejected. 7) ⊠ Claim(s) <u>8,9,12 and 13</u> is/are objected to. 8) □ Claim(s) are subject to restriction and/or | wn from consideration. | |
| Application Papers | · | • |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 11. | epted or b) objected to by the drawing(s) be held in abeyance. Setion is required if the drawing(s) is ob | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). |
| Priority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list | ts have been received. ts have been received in Applicat rity documents have been receive u (PCT Rule 17.2(a)). | ion No ed in this National Stage |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | |

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DETAILED ACTION

- 1. Claims 1-20 have been submitted for examination.
- 2. Claims 1-7, 10-11 and 14-20 have been rejected.
- 3. Claims 8-9 and 12-13 have been objected to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 1, 5-6, 10, 14 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Philip Schrodt, "Event Data in Foreign Policy Analysis" (Schrodt). Specifically,

Claim 1

Schrodt teaches a method of conflict assessment (page 2, fourth paragraph, event data is the method to measure the phenomena) using a relational database stored on a source medium loaded onto a computer system, (page 2, last paragraph; databank event data set is relational database; page 8, second paragraph where it says "event data collections were assembled." Assembled data is a relational database. The use of computer systems is anticipated at page 5, paragraph 4) comprising:

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- Selecting a country and time period to analyze (page 2, last paragraph, the selected country is Soviet Union with time period 1948-1978. The analysis is disclosed to not be limited to any specific single country, and therefore, it is inherent to select a country if conflict assessment is to be conducted.)
- Determining if the database contains enough information to perform a base assessment of the selected country (In view of indefiniteness of the phrase "enough information" in the claim, it is interpreted as determining if the information exists. Page 8, last paragraph discloses that data sets already existed are used and new data sets are also created which determines that the database does not contain enough information);
- Gathering up-to-the-moment information by Internet searches (page 5, first paragraph, disclosed as newswire service);
- Analyzing the information to determine a plurality of level of internal conflict indicators (page 2,paragraph 4, reported interaction is the indicator and the score is the determined level. An example of internal conflict is *intifada* uprising disclosed in page 3, the last paragraph, and page 4, paragraph 1)
- Factoring the present state of each indicator (page 5, paragraph 2., the categories of events are indicators) and the indicators' cumulative value against past conflict assessment by determining the rate of change in the state of conflict (page 4, paragraph 3; It cites "the time series gives a more exact measure of the patterns of events over time," hence it measures historically and statistically the event value. These events include event code 21143 the

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"Change in Combat Force Level" on Table 4 at page 12. So it measures over time the change, or rate, of change in combat force level, or the state of conflict.) and the differences in the contributing factors;

Outputting the assessment data results for a user to view (page 3, figure 1).

Claims 5-6

Official notice is taken of the fact that data may be stored on a 3½ inch diskette or a CD-ROM disk when a computer system is used (page 5, paragraph 4).

Claim 10

Schrodt teaches a storage media containing a database program for assessing and determining conflicts using a computer (using computer program is disclosed in page 5, paragraph 4; it is inherent for a computer program to be stored on a storage media such as, for example, hard drive, floppy disk, CD-ROM, or any type of computer memory), said program comprising:

- One code segment which loads/sets up said program onto said computer (it is inherent for a program running on a computer to have a code segment which loads said program in the operating memory of said computer);
- One code segment which determines if the program's internal database contains enough information to perform a base assessment on the selected input (In view of indefiniteness of the phrase "enough information" in the claim, it is interpreted as determining if the information exists. Page 8, last

paragraph discloses that data sets already existed are used and new data sets are also created which determines that the database does not contain enough information);

- One code segment which gathers additional information when needed to perform said base assessment (page 5, first paragraph, all information gathered from newspapers, magazines and newswire services can be viewed as additional if the database already has some information stored);
- One code segment which performs analysis on the indicators (page 2, paragraph 4, reported interaction is the indicator and the score is the determined level);
- One code segment which compares a present state of said indicators (page 5, paragraph 2., the categories of events are indicators) and said indicators' cumulative values against past assessments (page 4, paragraph 3 compares the level of conflict at two different time points);
- One code segment which determines a rate of change in a state of internal conflict and the differences in contributing factors (page 4, paragraph 3; It cites "the time series gives a more exact measure of the patterns of events over time," hence it measures historically and statistically the event value. These events include event code 21143 the "Change in Combat Force Level" on Table 4 at page 12. So it measures over time the change, or rate, of change in combat force level, or the state of conflict.; and

 One code segment which outputs assessment data results for the user to view (page 3, figure 1).

Claim 14

Schrodt teaches a method of conflict assessment, (page 2, fourth paragraph) containing a relational database of information relating to indicators. (page 2, last paragraph; databank event data set is relational database; page 8, second paragraph where it says "event data collections were assembled." Assembled data is relational database.) (These datum are variables, see page 2, first paragraph, that provide rough indication of the level of conflict, see page 2, forth paragraph, and these variables stored in database relates to indicators.)

- Updating the database with current information (page 8, last paragraph, page 9, first paragraph.)
- Analyzing the information to determine a plurality of level of conflict indicator for a country (page 8, paragraph 3., page 3, all paragraphs.)
- Determining a rate of change of conflict in the country (page 4, third paragraph)

Claim 20

Schrodt teaches the method of claim 1, wherein the conflict assessment is an internal conflict assessment within the selected country (An example of internal conflict is *intifada* uprising disclosed in page 3, the last paragraph, and page 4, paragraph 1).

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-4 rejected under 35 U.S.C. 103(a) as being unpatentable over Schrodt as applied to claim 1 above and further in view of Brandt, "Evaluating Information on the Internet" (Brandt)

Claims 2-4

(claim 2) The step of determining if the database contains enough information in claim 1 comprising:

- Searching all pre-determined online sources (page 5, paragraphs 1-2. the sources are identified, hence pre-determined, page 8, paragraph 2, "event data collections were assembled" hence searched from predetermined online sources.)
- Search database files (page 10, last paragraph. The COPDAB data set is the database.)
 - o (claim 3) the database files include categories of government, people, economy, geography, communication/transportation, military, health,

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domestic security, and international areas (page 11, paragraphs 1 and 2.

The events include political, economic or culture, etc.)

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- Determining the information reliability comprising'.
 - co (claim 4) corroborating information, determining computational relationships, identifying information holes and determining source reliability ratings (Brandt, page 3)

Schrodt teaches collecting information from variety sources including online.

Schrodt does not teach ways of determining the information reliability.

Brandt teaches ways of evaluating information on the Internet by checking reliability and credibility of the information for the purpose of ensuring that the information is authoritative and reliable (page 3)

It would have been obvious for one of ordinary skills in the art at the time of the invention by applicant to search online and other information source, store them in database, and evaluate both quality and completeness of the information as taught by Brandt for the purpose of ensuring that the information is authoritative and reliable, so that Schrodt's data both authoritative and reliable.

3. Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schrodt as applied to claim 1 above and further in view of Carnegie Mellon University, "Commercial Software Models." (CMU) Specifically,

Claim 7

Schrodt teaches a step of determining the level of indicators of selected country

in the method taught in claim 1.

Schrodt fails to teach the detail steps how to determine the level of indicators.

CMU teaches a Weighted Factors Approach that has the detail steps of

determining the level of indicators. The steps comprise:

Determining indicator rankings (Page 41, Figure 6-17, the table teaches the ranking

of the indicators).

Determining each indicator's weighted values (Page 40 last paragraph, Page 41,

Figure 6-17, the table teaches the weights of the indicators)

Determining the presence of anomalies that effect the ranked indicators (page 53,

the eighth bullet of Evidence of Credibility)

One of the ordinary skills in the art would have provided the Weighted Factors

Approach taught by CMU for the purpose of determining the level of indictors for the

selected country taught by Schrodt. As a result it would have been obvious to one of

ordinary skills in the art at the time of applicants' invention to further implement the

invention taught by Schrodt for determining the levels of indicators using Weighted

Factors Approach as taught by CMU as set forth above.

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Claim 11

Schrodt teaches a method of conflict assessment (page 2, fourth paragraph, event data is the method to measure the phenomena) using a relational database stored on a source medium loaded onto a computer system (using computer program is disclosed in page 5, paragraph 4; it is inherent for a computer program to be stored on a storage media such as, for example, hard drive, floppy disk, CD-ROM, or any type of computer memory), comprising the steps of:

- Selecting a country and time period to analyze (page 2, last paragraph, the selected country is Soviet Union with time period 1948-1978. The analysis is disclosed to not be limited to any specific single country, and therefore, it is inherent to select a country if conflict assessment is to be conducted.);
- Determining if the database contains enough information to perform a base assessment of the selected country (In view of indefiniteness of the phrase "enough information" in the claim, it is interpreted as determining if the information exists. Page 8, last paragraph discloses that data sets already existed are used and new data sets are also created which determines that the database does not contain enough information);
- Factoring the present state of each indicator (page 5, paragraph 2., the
 categories of events are indicators) and the indicators' cumulative value against
 past conflict assessments by determining a rate of change in the state of internal
 conflict and the differences in the contributing factors (page 4, paragraph 3; It
 cites "the time series gives a more exact measure of the patterns of events over

time," hence it measures historically and statistically the event value. These events include event code 21143 the "Change in Combat Force Level" on Table 4 at page 12. So it measures over time the change, or rate, of change in combat force level, or the state of conflict.); and

Outputting the assessment data results of a user to view (page 3, figure 1).

Schrodt fails to teach:

 Gathering up-to-the-moment information by determining indicator rankings for the selected country, determining each indicator's weighted values for the selected country, and determining the presence of anomalies that effect the ranked indicators;

CMU teaches CMU teaches a Weighted Factors Approach that has the detail steps of determining the level of indicators. The steps comprise:

- Determining indicator rankings (Page 41, Figure 6-17, the table teaches the ranking of the indicators).
- Determining each indicator's weighted values (Page 40 last paragraph, Page 41,
 Figure 6-17, the table teaches the weights of the indicators)
- Determining the presence of anomalies that effect the ranked indicators (page 53, the eighth bullet of Evidence of Credibility)

One of the ordinary skills in the art would have provided the Weighted Factors

Approach taught by CMU for the purpose of gathering up-to-the-moment information by

determining the level of indictors for the selected country taught by Schrodt. As a result

it would have been obvious to one of ordinary skills in the art at the time of applicants'

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invention to further implement the invention taught by Schrodt for determining the levels

of indicators using Weighted Factors Approach as taught by CMU as set forth above.

Claims 15-19

4. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Schrodt as applied to claim 14 above and further in view of Pauline Baker at "Session

III: Democracy and Governance: Justice and Security" (Baker) teaches indicators that

comprise:

• (claim 15) legacy of vengeance-seeking group grievance or group paranoia (list# 3)

• (claim 16) criminalization and/or delegitimization of the country (list# 7)

(claim 17) security apparatus (list# 10).

• (claim 18) rise of factionalized elites (list# 11)

• (claim 19) intervention of other states (list# 12)

Schrodt teaches event data method to measure conflict situation using

systematically measured variables by identifying sources of news (page 1, paragraph 1

and 4) and teaches the creation of relevant data for the variables (page 5, paragraph 1).

Schrodt does not limit particular sources of news and variables, hence does not teach

the data variables listed in claims 15-19 such as criminalization. One ordinary skill in the

art at the time of invention would have used the method taught by Schrodt to identify

information source and select related variables as listed in claims 15-19 taught by Baker.

Allowable Subject Matter

Claims 8-9 and 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Claim Rejections - 35 U.S.C. § 112, second paragraph

5. Applicant(s) argue(s) that claims 1-13 satisfy the requirement of using definite language and, therefore, should not be rejected under U.S.C. §112, second paragraph (Amendment REMARKS page 10).

Applicant's arguments have been fully considered and are persuasive. The 35 U.S.C. §112 second paragraph rejections of claims 1-13 have been withdrawn.

Claim Rejections 35 U.S.C. §102 and 35 U.S.C. §103

6. Applicant's arguments filed on January 20, 2006 have been fully considered but they are not persuasive.

Applicant argues that Schrodt does not teach assessing *internal* conflicts and that the *intifada* is not an example of such internal conflict, defining it as "a conflict between a people, the Palestinian Arabs, and an occupying Israeli army". Examiner

defines an internal conflict as a conflict that takes place on a territory of a single country, where the country represents an independent political entity. History knows many cases where a country would lose its sovereignty and become a part of another country by either a conquest or some other means. It is common for these countries to be populated by people of different nationalities. As a result, any international conflict within such country is not a conflict between two foreign nations, but an internal conflict between two nationalities populating the country. Examiner interprets intifada as an example of such internal conflict. To provide further support, Applicant uses Soviet Union as a source of internal conflicts. However, USSR perfectly matches the type of a multinational country defined by Examiner. USSR comprised multiple national states under a central rule, where some of these states have been attached by using military force. There have been multiple times when army has been used in internal conflicts within the USSR. Some of the examples would be Georgia (Tbilisi, April 1989) and Lithuania (Vilnius, January 1991). Therefore, internal conflict assessment of Schrodt is not patentably distinguishable from the conflict assessment of current application.

In view of presented arguments, claims 1, 5-6, 10 and 14 remain rejected under 35 U.S.C. §102(b) as being anticipated by Schrodt. Dependent claims, previously rejected under 35 U.S.C. 103, stay rejected due to the unchanged status of their parent claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sergey Datskovskiy whose telephone number is (571) 272-8188. The examiner can normally be reached on Monday-Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight, can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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